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BUTCH TONGATE
Cabinet Secretary

J. C. BORREGO
Deputy Secretary

Certified Mail – Return Receipt Requested

September 6, 2018

Mr. Michael Coats, Area Manager
Chevron Mining Inc., Questa Mine
P. O. Box 469
Questa, NM 87556

Re: Chevron Mining, Inc. (CMI), Questa Mine; Major Individual Permit; SIC 1061; NPDES Compliance Evaluation Inspection (CEI); NM0022306; July 24 thru July 26, 2018

Dear Mr. Coats:

Enclosed please find a copy of the report for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

David Long
NPDES Enforcement Coordinator
Environmental Protection Agency, Region 6
NPDES Enforcement Branch (6EN-WM)
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Sarah Holcomb, Program Manager
New Mexico Environment Department
Surface Water Quality Bureau (N2050)
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

If you have any questions about this inspection report, please contact Erin Trujillo at 505-827-0418 or at erin.trujillo@state.nm.us.

Sincerely,

/s/Sarah Holcomb

Sarah Holcomb
Program Manager
Point Source Regulation Section
Surface Water Quality Bureau

cc: Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Nancy Williams, USEPA (6EN-WC) by e-mail
David Long, USEPA (6EN-WM) by e-mail
Robert Houston, USEPA (6EN-WS) by e-mail
David Esparza, USEPA (6EN-WM) by e-mail
Amy Andrews, USEPA (6EN-WM) by e-mail
Tony Loston, USEPA (6EN-WM) by e-mail
Brent Larsen and Tung Nguyen, USEPA (6WQ-PP) by e-mail
Gary Baumgarten, USEPA (6SF-RA) by e-mail
Robert Italiano, NMED District II by e-mail
Anne Mauer, Chevron-Questa Mine Permit Lead, NMED GWQB by e-mail
Joseph C. Fox, NMED GWQB by e-mail
Armando Martinez, Chevron EMC by e-mail
Jeff Schoenbacker, Chevron EMC by e-mail

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

1	Transaction Code	2	NPDES	11	yr/mo/day	17	Inspec. Type	18	Inspector	19	Fac Type	20
	N	5	NM0002306	12	180724		C		S		2	

Remarks: CLOSED MOLYBDENUM MINE & MILL

Inspection Work Days	67–69	Facility Evaluation Rating	70	BI	71	QA	72	73	74	75–80
			2		N		N			Reserved

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*

Chevron Mining Inc. (CMI), Questa Mine, Main office 3.5 miles east of Questa, NM, north side of NM 38. Tailings facility exists west of NM 522 in Questa, NM. Taos County.

Entry Time /Date
~0945 hrs / 07/24/2018
~0725 hrs / 07/25/2018
~0745 hrs / 07/26/2018

Permit Effective Date
November 1, 2013

Exit Time/Date
~1630 hrs / 07/24/2018
~1630 hrs / 07/25/2018
~1245 hrs / 07/26/2018

Permit Expiration Date
October 31, 2018

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
-Armando Martinez, Env. Manager, Chevron Env. Management Company (EMC) / 575-586-7639
-Jeff Schoenbacker, Project Manager, Chevron EMC / 575-586-7537
-Frank Robinson, Site Manager, Water Treatment Plant, Golder Associates, Inc. / 505-492-1023
-Gabe Herrera, Chevron EMC
-Jim Cox, Chevron Project Manager/Contractor

Other Facility Data

Administrative Mine Office Entrance
36.689328°, -105.540013°

SIC 1061

Name, Address of Responsible Official/Title/Phone and Fax Number
-Mr. Michael Coats, Area Manager, Chevron Mining Inc., Questa Mine, P. O. Box 469, Questa, NM 87556 / 575-586-7521, Fax 575-586-0811

Contacted: Yes [ ] No [*]

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

M	Permit	M	Flow Measurement	M	Operations & Maintenance	N	CSO/SSO
M	Records/Reports	U	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
N	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
U	Effluent/Receiving Waters	U	Laboratory	N	Storm Water	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

1. The mining and mill operations have closed. Decommission, demolition, industrial water treatment operations and reclamation operations at the facility are active. See attached checklist report and further explanations.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
Erin S. Trujillo */s/Erin S. Trujillo*	**NMED/SWQB/505-827-0418**	**09/05/2018**
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date**
Jennifer Foote */s/Jennifer Foote*	**NMED/SWQB/505-827-0596**	**09/06/2018**

CMI, Inc. – Questa Mine – July 24 thru 26, 2018	PERMIT NO. **NM0022306**

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS ☐ S ☒ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED* ***Yes***)
DETAILS: **Permittee submitted renewal application dated April 30, 2018. See Further Explanations.**

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE. ☒ Y ☐ N ☐ NA

2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES. ☐ Y ☐ N ☒ NA

3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT. ☒ Y ☐ N ☐ NA

4. ALL DISCHARGES ARE PERMITTED. ☒ Y ☐ N ☐ NA

SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. ☐ S ☒ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED* ***Yes***)
DETAILS: **USEPA NetDMR subscriber agreement approved 06/27/2011 and DMRs submitted electronically.**

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs. **See Further Explanations** ☐ Y ☒ N ☐ NA

2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE. ☒ S ☐ M ☐ U ☐ NA

a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING. ☒ Y ☐ N ☐ NA

b) NAME OF INDIVIDUAL PERFORMING SAMPLING ☒ Y ☐ N ☐ NA

c) ANALYTICAL METHODS AND TECHNIQUES. ☒ Y ☐ N ☐ NA

d) RESULTS OF ANALYSES AND CALIBRATIONS. ☒ Y ☐ N ☐ NA

e) DATES AND TIMES OF ANALYSES. **Contract laboratory time of analyses** ☐ Y ☒ N ☐ NA

f) NAME OF PERSON(S) PERFORMING ANALYSES. **Contract laboratory name** ☐ Y ☒ N ☐ NA

3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE. ☒ S ☐ M ☐ U ☐ NA

4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR. ☒ S ☐ M ☐ U ☐ NA

5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA. ☒ Y ☐ N ☐ NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. ☐ S ☒ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED* ***Yes***)
DETAILS: **WTP = Satisfactory. For water collection systems, outages continue. Yearly maintenance for spring interception system scheduled for September 2018. See Further Explanations Section A & Section O for spring interception system.**

1. TREATMENT UNITS PROPERLY OPERATED. ☒ S ☐ M ☐ U ☐ NA

2. TREATMENT UNITS PROPERLY MAINTAINED. **See Photo Documentation for WTP Clarifier Weir** ☐ S ☒ M ☐ U ☐ NA

3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED. **See Further Explanations** ☐ S ☒ M ☐ U ☐ NA

4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE. **Daily inspections logged** ☒ S ☐ M ☐ U ☐ NA

5. ALL NEEDED TREATMENT UNITS IN SERVICE. ☒ S ☐ M ☐ U ☐ NA

6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED. ☒ S ☐ M ☐ U ☐ NA

7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED. ☒ S ☐ M ☐ U ☐ NA

8. OPERATION AND MAINTENANCE MANUAL AVAILABLE. **See Further Explanations** ☒ Y ☐ N ☐ NA
STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED. ☒ Y ☐ N ☐ NA
PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED. **WTP upset cell** ☒ Y ☐ N ☐ NA

CMI, Inc. – Questa Mine – July 24 thru 26, 2018	PERMIT NO. **NM0022306**

SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR?	☐ Y ☒ N ☐ NA
IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED?	☐ Y ☐ N ☒ NA
HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?	☐ Y ☐ N ☒ NA
10.HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT?	☐ Y ☒ N ☐ NA
IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?	☐ Y ☐ N ☒ NA

SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. ☐ S ☐ M ☒ U ☐ NA *(FURTHER EXPLANATION ATTACHED **Yes**).*
DETAILS:

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.	☒ Y ☐ N ☐ NA
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.	☒ Y ☐ N ☐ NA
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.	☒ Y ☐ N ☐ NA
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.	☒ Y ☐ N ☐ NA
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.	☒ Y ☐ N ☐ NA
6. SAMPLE COLLECTION PROCEDURES ADEQUATE.	☐ Y ☒ N ☐ NA
a) SAMPLES REFRIGERATED DURING COMPOSITING.	☒ Y ☐ N ☐ NA
b) PROPER PRESERVATION TECHNIQUES USED. **Not documented / See Further Explanations**	☐ Y ☒ N ☐ NA
c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3.	☒ Y ☐ N ☐ NA
7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT? **pH**	☒ Y ☐ N ☐ NA

SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. ☐ S ☒ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED **Yes**)*
DETAILS: **Outfall 004 and Outfall 005 flow measurement devices are weir in Part I.A of Permit. No discharge at Outfalls 004 & 005. See Further Explanations Section A / Section E for Outfalls 004 & 005.**

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED.	☒ Y ☐ N ☐ NA
TYPE OF DEVICE **Magnetic Flow Meter**	
Communication data gaps reported	
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED. **July 6, 2017 (06/12/2017) and June 5, 2018 (5/29-5/31/2018)**	☐ Y ☒ N ☐ NA/
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED.	☒ Y ☐ N ☐ NA
4. CALIBRATION FREQUENCY ADEQUATE.	☐ Y ☐ N ☒ NA
RECORDS MAINTAINED OF CALIBRATION PROCEDURES.	☐ Y ☐ N ☒ NA
CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.	☐ Y ☐ N ☒ NA
5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE.	☐ Y ☐ N ☒ NA
6. HEAD MEASURED AT PROPER LOCATION.	☐ Y ☐ N ☒ NA
7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES.	☒ Y ☐ N ☐ NA

SECTION F – LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. ☐ S ☐ M ☒ U ☐ NA *(FURTHER EXPLANATION ATTACHED **Yes**)*
DETAILS: **Contract commercial laboratories not inspected. Permittee conducts pH monitoring on site.**

1. EPA APPROVED ANALYTICAL PROCEDURES USED *(40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES).* **Some effluent characteristics** ☐ Y ☒ N ☐ NA

CMI, Inc. – Questa Mine – July 24 thru 26, 2018	PERMIT NO. **NM0022306**

SECTION F - LABORATORY (CONT'D)

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED. **Not documented** ☐ Y ☒ N ☐ NA

3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. ☒ S ☐ M ☐ U ☐ NA

4. QUALITY CONTROL PROCEDURES ADEQUATE. **See Further Explanation** ☐ S ☒ M ☐ U ☐ NA

5. DUPLICATE SAMPLES ARE ANALYZED. **100 % (pH) / 100 % (Lab), 1/qtr** % OF THE TIME. ☒ Y ☐ N ☐ NA

6. SPIKED SAMPLES ARE ANALYZED. **100 (Laboratory)** % OF THE TIME. ☒ Y ☐ N ☐ NA

7. COMMERCIAL LABORATORY USED. ☒ Y ☐ N ☐ NA

LAB NAME	**ALS (970-490-1511)**	**GEI Consultants (303-662-0100)**
LAB ADDRESS	**225 Commerce Drive, Fort Collins, CO 80524**	**4601 DTC Boulevard, Ste 900, Denver, CO 80237**
PARAMETERS PERFORMED	**Metals, Fluoride, TSS, Effluent Characteristics**	**WET**

SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. ☐ S ☐ M ☒ U ☐ NA *(FURTHER EXPLANATION ATTACHED **Yes**).*

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
new 001	**None**	**None**	**Clear**	**None**	**None**	**None**	**NA**
002	**Not observed**	**Not observed**	**Not observed**	**Not observed**	**Not observed**	**Not observed**	**NA**
004	**No discharge**	**No discharge**	**No discharge**	**No discharge**	**No discharge**	**No discharge**	**NA**
005	**No discharge**	**No discharge**	**No discharge**	**No discharge**	**No discharge**	**No discharge**	**NA**

RECEIVING WATER OBSERVATIONS **See Further Explanations / Photo documentation**

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. ☐ S ☐ M ☐ U ☒ NA *(FURTHER EXPLANATION ATTACHED **No**).*
DETAILS:

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. ☐ S ☐ M ☐ U ☒ NA

2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503. ☐ S ☐ M ☐ U ☒ NA

3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: **NA** (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

SECTION I - SAMPLING INSPECTION PROCEDURES *(FURTHER EXPLANATION ATTACHED **No**).*

1. SAMPLES OBTAINED THIS INSPECTION. ☐ Y ☐ N ☒ NA

2. TYPE OF SAMPLE OBTAINED

GRAB _____ COMPOSITE SAMPLE ___ METHOD _____ FREQUENCY

3. SAMPLES PRESERVED. ☐ Y ☐ N ☒ NA

4. FLOW PROPORTIONED SAMPLES OBTAINED. ☐ Y ☐ N ☒ NA

5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE. ☐ Y ☐ N ☒ NA

6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE. ☐ Y ☐ N ☒ NA

7. SAMPLE SPLIT WITH PERMITTEE. ☐ Y ☐ N ☒ NA

8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED. ☐ Y ☐ N ☒ NA

9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT. ☐ Y ☐ N ☒ NA

Chevron Mining Inc. - Questa Mine
NPDES Permit No. NM0022306
Compliance Evaluation Inspection
July 24 thru 26, 2018

Further Explanations

Introduction

On July 24, 25 and 26, 2018, an announced Compliance Evaluation Inspection (CEI) was conducted by Erin S. Trujillo of the State of New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) at the Chevron Mining Inc. (CMI), Questa Mine (formerly Molycorp) near the Village of Questa, Taos County, New Mexico. Ms. Trujillo was accompanied by Ms. Sarah Holcomb, Program Manager, Point Source Regulation Section, SWQB and Mr. Joseph Marcoline, Ground Water Quality Bureau (GWQB) both of the NMED during portions of this inspection. Questa Mine is classified as a major facility discharger under the federal Clean Water Act, Section 402 NPDES permit program and is assigned permit number NM0022306.

Upon arrival at the facility on July 24, 2016 at approximately 0945 hours, Ms. Trujillo made introductions, presented credentials, and discussed the purpose of the CEI with Mr. Armando Martinez, Environmental Manager and Mr. Jeff Schoenbacker, Project Manager, both of Chevron Environmental Management Company (Chevron EMC). Ms. Trujillo toured the site with Mr. Martinez and other Permittee Representatives. Ms. Trujillo conducted a brief exit interview on site at CMI's offices to discuss preliminary findings with Mr. Martinez and Mr. Schoenbacker. Ms. Trujillo left the facility at approximately 1245 hours on July 26, 2018.

NMED performs a certain number of CEIs for the U.S. Environmental Protection Agency (USEPA) each year. This report is based on review of files maintained by the permittee and NMED, on-site observation by NMED personnel, and verbal and follow up e-mail information provided by the permittee's representatives. A separate NPDES CEI report for Industrial Stormwater Multi-Sector General Permit (MSGP) Tracking No. NMR053300 was submitted under a separate EPA Form 3560.

Background

The mine operated intermittently from 1920 until 2014. Open pit mining and milling took place at the facility from 1965 to 1983. Facilities include underground molybdenum mine, mill area, tailing disposal impoundments (tailing facility), historic open pit and massive waste rock piles. Acid-generating waste rock were excavated and deposited in nine large waste rock piles. Rock piles, approximately 328 million tons on 750 acres at the mine site include Capulin, Goathill North, Goathill South, Sugar Shack West, Sugar Shack South, Middle, Sulphur Gulch South, Spring Gulch and Sulphur Gulch North / Blind Gulch. After molybdenum was extracted from ore, the tailing was transported by pipeline to a tailing facility where it was deposited in tailing impoundments for disposal. Mining operations and waste disposal contaminated soil, sediment, surface water and groundwater. USEPA re-proposed the Molycorp, Inc. site to the National Priorities List (NPL) of Superfund Sites in March 2011. The site was placed on the NPL on September 16, 2011. Delivery of process water and tailing from the mill at the mine to the tailings facility stopped in October 2012. CMI announced the cessation of mining operations at the Questa Mine on June 2, 2014. Delivery of process water to the Tailings Facility Dam No. 4 impoundment continued until May 2017 when all water delivery to the tailings facility ceased. Closeout activities continue with phased decommissioning and demolition of selected surface facilities at the Mill Area, Mine Area, and Tailing Facility. Mine reclamation activities have not been completed.

USEPA Region 6, Record of Decision (ROD), Molycorp, Inc., Questa, New Mexico, Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) ID No: NMD002899094, dated December 20, 2010 is the decision document that presents the *"Selected Remedy"* for the Site chosen in accordance with Comprehensive Environmental Response, Compensation, and

Liability Act of 1980 (CERCLA) and National Oil and Hazardous Substances Pollution Contingency Plan. USEPA decided to continue or proceed with NPDES permitting for some discharges under the Selected Remedy. Other permits for the Questa Mine activities include NMED Groundwater Quality Bureau (GWQB) ground water discharge permits DP-1055 (waste rock stockpiles), DP-1539 (water management systems) and DP-933 (tailings impoundment), and the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD) Mining and Minerals Division (MMD) permit.

The facility is located in the watershed of the Red River which includes several tributaries, including Sulfur Gulch, Spring Gulch, Goathill Gulch and Capulin Canyon. Discharges from four outfalls (Outfalls 002, 004, and 005 and new Outfall 001) are authorized by the USEPA NPDES Permit No. NM0022306 to Red River in *State of New Mexico Standards for Interstate and Intrastate Surface Waters* Segment 20.6.4.122 New Mexico Administrative Code (NMAC) of the Rio Grande Basin. Designated uses for this segment of Red River are coldwater aquatic life, fish culture, irrigation, livestock watering, wildlife habitat and primary contact.

Questa Mine's NPDES Permit is available at https://www.env.nm.gov/swqb/NPDES/Permits/NM0022306-Chevron-Questa.pdf. Further summary of the site background, activities, CERCLA selected remedy and relationship to NPDES authorized discharges, authorized outfalls, seepage interception systems and ground water withdrawal was provided in the September 2014 and September 2015 NPDES CEI reports and June-July 2016 Reconnaissance Inspection reports available at:

https://www.env.nm.gov/swqb/NPDES/Inspections/NM0022306-20140923.pdf

https://www.env.nm.gov/swqb/NPDES/Inspections/NM0022306-20150928.pdf

https://www.env.nm.gov/swqb/NPDES/Inspections/NM0022306-20160602.pdf

Outfall 002

Outfall 002 is located at the tailings facility and discharges seepage interception system collected waters from the tailing impoundments. Additional upgrades and improvements include new extraction wells added to the existing seepage interception system south of Dam No. 1 and on the eastern flank of Dam No. 4, and an existing seepage barrier will be refurbished and brought back online. A new groundwater extraction system south of the former Dry Maintenance area will be designed and installed to control a molybdenum plume in that area. In January 2004, CMI began operation of a pumpback system to reduce the manganese load discharged at Outfall 002. The pumpback system consists of a new manhole, and the extraction wells, rock-fill drains, and toe drain at the base of Dam No. 1 were replumbed and now discharge into the pumpback manhole. The collected water has not been part of the Outfall 002 discharge, but instead has been pumped northward over Dam No. 1 and discharges into the decant pond on the western side of the tailings facility. Water entering the pumpback is plumbed to the existing Outfall 002 collection manhole then to the Red River.

Outfall 004 and Outfall 005

Outfall 004 and Outfall 005 are permitted for potential stormwater discharge and have not reportedly discharge for the past two permit terms. Outfall 004 is located below a series of catchments in Goathill Gulch below the subsidence area and Outfall 005 is located in the former mill site area, now location of the WTP.

Best Management Practices

Operation and proper maintenance of Spring 13 and Spring 39 seepage interception systems and ground water withdrawal downgradient of the Sugar Shack waste rock pile are Best Management Practices (BMPs)

required under USEPA NPDES Permit No. NM022306 to comply with the prohibition against the discharge to the Red River of pollutants traceable to point source mine operations.

Outfall 001 / WTP Treatment Scheme

CERCLIS Statement of Work for the First Partial Remedial Design/Remedial Action Consent Decree entered May 1, 2017 required a Remedial Action Project Construction Completion Report for the water treatment plant and submitted to USEPA CERCLA after initial shakedown is completed. Preparation of an operations and Maintenance (O&M) Plan and O&M Manual for the water treatment plant was also required. New Outfall 001, located at the former mill site area and the location of the new water treatment plant (WTP), reportedly began discharge on July 6, 2017.

Collected Waters and WTP Overview: Collected waters from two natural springs adjacent to mine property (Spring 13 and Spring 39 collection systems), underground mine dewatering, groundwater withdrawal wells (GWWs) below rock piles (GWW-1, GWW-2, and GWW-3), and stormwater runoff is treated before discharge. Underground mine dewatering is pumped to an equalization tank and other collected waters are directed into a second equalization tank that feed the water treatment plant. Stormwater from the watershed above the plant, when present, is routed to an adjacent stormwater catchment and then pumped to the water treatment building as a third influent source. WTP equipment includes mix tanks, clarifiers, ultrafilters, nanofilters, storage tanks, filter presses, pumps, and chemical feed systems.

The treatment process consists of two nearly identical trains of chemical precipitation, clarification, and filtration. These trains operate in parallel to provide redundancy and to allow treatment of both collected water and stormwater simultaneously. Each train is sized to handle a nominal maximum influent flow of 1,600 gallons per minute (gpm). The primary treatment process (discussed below) consists of the following five steps or stages: 1) iron co-precipitation, 2) aluminum removal, 3) softening pre-treatment, 4) ultrafiltration, and 5) final pH adjustment. Secondary treatment (discussed below) consisting of nanofiltration, gypsum desaturation and carbonation stages have been installed and may be operated, if required. The treated water is pumped to two large effluent storage tanks and discharged to the Red River at Outfall 001. Off-spec water can be directed to the upset cell in the combined lined Stormwater Enhanced 005 Catchment / Upset Cell still under construction in the Mill Basin Project. WTP water from the effluent surge tanks can also be directed for utility water supply. A lined, dual-cell waste repository is located adjacent to the plant building for disposal of filter cake. A control room, laboratory, locker rooms, offices, and shop are also located within the building.

WTP Primary Treatment: The first stage of primary treatment is iron co-precipitation (ICP) where pH of the influent water is adjusted with ferric chloride to remove molybdenum. A pH of 4.0 to 4.5 standard units (s.u.) is considered optimal in the design, but molybdenum removal also occurs at higher pH. Equipment for the ICP process includes one reaction tank and subsequent clarifier. In the next stage in primary treatment is aluminum removal of waters from either the ICP treatment or raw water from the equalization tanks or stored stormwater. Stormwater may be treated in a separate train through the rest of the primary treatment stages. Lime is added to raise pH to approximately 6.5 to 7.0 s.u. Precipitated aluminum solids are settled and removed from the water in a clarifier. Aluminum removal also protects the subsequent ultrafilters and nanofilters from excessive scaling. After aluminum removal, flow is gravity fed to a softening stage where pH is raised to 9.5 to 10.5 s.u. by the addition of lime to remove manganese and other metals. Softening also protects the ultrafilters and nanofilters from potential excessive scaling. After softening, flow is passed through a series of ultrafilters to remove fine particulate matter, including precipitated metal compounds. Filtrate from the ultrafilters is sent to the effluent surge tanks and carbonic acid is dosed to reduce pH in the effluent discharge. Water from the effluent surge tanks is sent to the effluent storage tanks for discharge to the Red River.

WTP Secondary Treatment: The nanofilters of the installed secondary treatment are designed to remove dissolved constituents and sulfate. Filtrate from the nanofiltration system would be adjusted to a neutral pH around 7.0 s.u. with carbonic acid and sent to surge tanks and storage tanks prior to discharge. The brine concentrate from nanofiltration would be sent to a gypsum desaturation stage where ferrous or ferric chloride

may be added as needed to accelerate gypsum precipitation. This chemical addition would deactivate the anti-scalant added in the filtration, as well as target selenium removal. The gypsum-rich solids precipitated would be removed by clarification. The two treatment trains are designed to receive effluent from the gypsum desaturation that is recycled back to the aluminum removal system for sulfate removal, and to minimize the amount of concentrate that is sent to the discharge. After gypsum desaturation, carbonation would be added for pH adjustment and calcium removal. If needed, carbonic acid would be added to reduce total dissolved solids. Carbonation includes a lamella clarifier to remove precipitate formed by carbonation. Carbonation effluent would be blended with nanofiltration permeate in surge tanks before being sent to the effluent storage tanks for discharge to the Red River.

WTP Solids Removal: Sludge from collected and stormwater aluminum removal and lime pretreatment; and, if used, gypsum desaturation, enter a thickener stage before sludge storage tanks. Sludge from the ICP stage enter a separate sludge storage tank. The WTP facility includes filter presses. Filtrate returns to a backwash tank. Solids are dropped to roll offs then stored on site in one of two (one cell is for low pH) sludge containment cells.

Compliance Schedules/USEPA Closed Administrative Orders

Part I.B of the 2013 NPDES Permit included a compliance schedule to *"[t]otally cease conveying mill process wastewater, mine drainage, and captured groundwater or spring water to tailings facility"* and *"[c]omply with the effluent limitations established at Outfall 001"* by October 1, 2016. USEPA issued Administrative Order (AO), Docket Number CWA-06-2017-1708 dated November 18, 2016 for *"unauthorized discharges"* with a compliance report deadline of December 2, 2016. USEPA issued AO Docket Number CWA-06-2017-1728 on February 8, 2017 for *"the violations alleged are for the resumption of discharges of waste streams to the tailings facility…alleged violations are for unauthorized discharges."* CWA-06-2017-1728 AO included a deadline for the complete construction of wastewater treatment plant on February 20, 2017; and cease conveying mill process wastewater, mine drainage, captured ground water, and spring water to tailings facility on June 9, 2017. Discharges to the tailings facility ceased in July 2017. The WTP was completed and discharges to the new Outfall was reported to start on July 6, 2017. USEPA's letter dated March 20, 2018 states that the 2017 AO is "*hereby closed."*

Section A - Permit Verification (See Section C O&M for BMPs and Section E Flow Measurement for Outfalls 004 and 005) – All Marginal

Duty of Reapply Permit Requirements and Findings

- Part III.A.4 (General Conditions, Duty to Reapply) of the 2013 NPDES Permit states *"If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit."*

  Permittee submitted renewal application to USEPA Region 6 2013 Permit Writer dated April 30, 2018 (six months, but greater than 180 days before the permit expires on October 31, 2018). USEPA issued an administratively complete letter dated May 25, 2018.

Spring 13 and Spring 39 Interception System and Ground Water Well System Permit Requirements and Repeat/Continued Findings

- Updates, specification and/or clarification of requirements for the BMP conditions appear needed in the NPDES Permit.

  Permit Requirements: Part II.D. Best Management Practices of the 2013 NPDES Permit for the spring interception systems and groundwater wells states "*This permit prohibits the discharge to the Red River of pollutants traceable to point source mine operations except in trace amounts"* and *"[i]mplementation*

of these Best Management Practices…is considered compliance with this prohibition." Part II.D of the NPDES Permit states *"The permittee shall also properly operate the ground water withdrawal well below the toe of the Sugar Shack South deposit at a location approximately 100 yards southwest of the old mill site."* Part III.B.3.a (Standard Conditions, Proper Operation and Maintenance) of the 2013 NPDES Permit states *"The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit…This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit."*

Non-compliance report and recordkeeping requirements in the 2013 NPDES Permit include Part III.D.11 (signatory requirements), Part III.D.7.b and c (steps and waiving each written report), and Part III.B.4 (specific conditions and allowances).

Findings/Additional Information: Permit Verification, Reports & Record Keeping and Operations & Maintenance findings for the decreased pumping rates of the interception systems and visible white aluminum hydroxide precipitates at Spring 13 and Spring 39 were discussed in the 2015 NPDES CEI and 2016 NPDES RI reports. Not all current or planned groundwater wells are described in the 2013 NPDES Permit. Related to effectiveness, CMI's 2018 NPDES Renewal Application April 30, 2018, GEI, Technical Memorandum, Supplemental Information, Section 3.1 Mine Site states *"The Spring 13 and Spring 39 systems were found to remove little mass of constituents and have had a near negligible impact on the river water quality due to reduced concentrations at the Spring 39 system and low collection rates from iron precipitate fouling at the Spring 13 system."* Temporary shut downs or outages of all or portions of the seepage interception and groundwater withdrawal well systems continue due to maintenance, construction, and electrical problems. A summary of reported planned and unplanned outages submitted by Permittee Representatives by e-mail since the 2016 NPDES RI report is attached. Reviewed e-mail notifications for outages / possible non-compliance did not include steps being taken to reduce, eliminate, and prevent recurrence (see Part III.D.7.b of the 2013 NPDES Permit).

Outfall 004 and Outfall 005 Location and Flow Measurement Accuracy

- Additional clarification or information (e.g., discharge tables or model calculations) may be needed to confirm that the flow measurements for Outfall 004 and Outfall 005 meet accuracy requirements of the NPDES Permit. Additional clarification appears needed to describe discharge locations in the NPDES Permit.

Permit Requirements: Location of the measurement locations for Outfall 004 and Outfall 005 is provided in the 2013 NPDES Permit. Flow Type in Part I.A for Outfalls 004 and 005 states *"Measure by Weir."* Part III.D.6 (flow measurements) of the 2013 NPDES Permit states:

> *Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.*

Findings/Additional Information: CMI's 2018 NPDES Renewal Application Form 2C does not provide estimate average flow for Outfall 004 or Outfall 005. Outfall 004 has a weir installed in a shallow channel (2014 NPDES CEI report). The 2018 NPDES Renewal Application describes changes to the Outfall 005 catchment basin and flow measurement which are under construction. The Enhanced Outfall 005 Catchment is a concrete-lined stormwater storage facility that also has a connection by a spillway to the WTP upset cell. Collected water that exceeds the storage capacity of the catchment (100-year 24-

hour event) water would discharge over the spillway to Outfall 005. The application describes that the spillway is 400 ft long, protected with D50 riprap, three (3) feet below the catchment crest. The spillway was designed to function as a broad-crested weir. There is no channel described for the weir. The renewal application states that *"A staff gage will be installed as part of the Enhanced 005 Catchment that can be used to measure the depth of water flowing over the spillway and thereby estimate the discharge from the spillway."* The 2018 Renewal Application describes that the discharge from the spillway would enter the Red River at the previous Outfall 005 location. Figure 1 of the 2018 NPDES Renewal Application does not show where a 400-foot wide discharge would cross under highway NM 38 and enter Red River.

Outfall 002/003 Seepage Interception System Upgrade

- Part I of the 2013 NPDES Permit includes both loading and concentration effluent limitations and monitoring. Part III.D.I.a (Reporting Requirements, Planned Changes, Industrial Permits) of the 2013 NPDES Permit states *"The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility…."*

  Loading information is discussed for the upgrades to the Outfall 002/003 seepage interception system in the 2018 Renewal Application (Appendix D, Water Management Update and Evaluation of Best Management Practices, Arcadis U.S., Inc., April 20, 2018). However, more information on the specific quantities and concentrations (nature or quantity of pollutants), which were used to estimate loading may be needed for Outfall 002.

Section B – Record Keeping and Reporting – Marginal

Permit Requirements

Part III.C.4 (Monitoring and Records, Record Contents) of the 2013 NPDES Permit states

Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) and time(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

Findings

- Reviewed contract laboratory analysis reports did not record the time of analyses or the name of the person(s) performing analyses.

- Reviewed analytical results were not consistent with data reported on Discharge Monitoring Results (DMRs).

  Part I.A (Effluent Limitations and Monitoring Requirements, Outfall 002) in the 2013 NPDES Permit include a TSS Daily Max concentration of 30 mg/L. For monitoring results on the June 2016 DMR, the TSS Daily Max was reported as less than (<), but the result was described as a detected concentration (63 mg/L) in non-compliance reporting. No averaging or calculations are used when reporting valid daily max concentrations.

  Part I.A and Part II in the 2013 NPDES Permit require monitoring and reporting of whole effluent toxicity (WET) testing. Conditional retests were not accurately reported on DMRs for Outfall 001 and

Outfall 002 based on information from the Permittee Representatives. All conditional retest reporting (#1, #2 and #3) for monitoring location TX1Q and TX2Q should be reviewed and corrected, as needed.

Additional Information: For WET testing retests, a "1" is entered if the No Observed Effects Concentration (NOEC) for survival and/or sub-lethal effects is less than the critical dilution; otherwise "0" is entered on the DMR. Reporting "1" or "0" indicates a retest was conducted. After discharges started in July 2017 thru June 2018, monthly Outfall 001 WET quarterly retests were reported as "0" indicating that a WET retest was conducted. Permittee Representatives described that no retests were required or conducted thru June 2018. Outfall 002 WET quarterly retests (TX2Q) were shown as "*Not Received*" on USEPA's summary reports. Permittee representatives may contact USEPA NetDMR contacts if there are questions on *"no discharge"* or in this case no data reporting or receipt of DMRs submitted electronically. A list of No Discharge/No Data (NODI) codes obtained August 2018 from USEPA R6 NetDMR contacts is attached. For example, NODI Code 9 indicates Conditional Monitoring-Not required this period.

Additional Comments

Comments added to the June 2018 WET testing DMR provide additional information on the effect threshold concentration (IC25) of 68% effluent. IC25 value is a statistical calculation of the effluent concentration which causes a 25% reduction in growth or reproduction of test organisms. IC25 results are not required to be reported by USEPA Region 6 in the State of New Mexico. Comments added to the Outfall 001 June 2018 WET testing DMR also include questions requesting clarifications on permit language for Toxic Reduction Evaluations (TREs). The Permittee would need to submit a written request or contact the USEPA Permit Writer directly to receive clarification and confirmation on percent effluent requirements for sub-lethal TRE.

Section D – Self Monitoring and Section F Laboratory – Both Unsatisfactory

Permit Requirements

- Part I.A (Monitoring Requirements, Outfall 002) in the 2013 NPDES Permit require annual 24-hour composite monitoring and reporting for dissolved uranium and quarterly 24-hour composite monitoring and reporting for total cyanide.

- Part I.D (Effluent Characteristic Analysis for New Discharges, Outfall 001) of the 2013 NPDES Permit states *"beginning the start-up of the new water treatment and lasting through the expiration date of the permit, the permittee shall collect samples at Outfall 001 once per calendar year, during the period of mill operations, for analysis of effluent characteristics as listed below. Samples shall be taken at least six months apart or longer. The first sample shall be taken within the 30 days of first commencing discharge after the final compliance schedule."* Parameter categories include Radioactivity, Nutrients, and Chlorine; Volatile Compounds; Acid Compounds; Base/Neutral Compounds; and Pesticides and PCBs. Part I.D of the 2013 NPDES Permit also states "*In additional to annual effluent characteristics samples as addressed above, the permittee must also tak samples once per calendar quarter for…METALS AND CYANIDE Antimony (D); Arsenic (D); Beryllium (D); Cadmium (D); Chromium-III (D); Chromium-VI (D); Chromium (D); Copper (D); Lead (D); Manganese (D); Mercury (T & D); Molybdenum (T & D); Nickel (D); Selenium (T); Silver (D); Thallium (D); Zinc (D); and Cyanide (T). [Note: T means total recoverable or total and D means dissolved.]"*

- Part III.C.5.a (Monitoring and Records, Monitoring Procedures) of the 2013 NPDES Permit states *"[m]onitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator."*

Findings

- Annual dissolved uranium samples were not filtered within 15 minutes of collection of the last 24-hour composite grab sample based on discussions with the Permittee Representatives. USEPA DMR NODI Code H indicates an "Invalid Test."

  Additional Notes: 40 CFR 136.3 Table II Footnote 7 states "*For dissolved metals, filter grab samples within 15 minutes of collection and before adding preservatives. For a composite sample…filter the sample within 15 minutes after completion of collection and before adding preservatives. If it is known or suspected that dissolved sample integrity will be compromised during collection of a composite sample…over time (e.g., by interchange of a metal between dissolved and suspended forms), collect and filter grab samples to be composited....*"

- Chevron Mining-Questa Mine Standard Operating Procedures (SOP), January 5, 2016, Section 10.0, Page 14 lists "*No Preservation*" for radiological parameters (e.g., Alpha) and dissolved chromium VI that are not consistent with Table II (Required Containers, Preservation Techniques, and Holding Times) in 40 CFR 136.3. Required acid preservation was not documented.

  Additional Notes:

  40 CFR 136.3 Table II for Radiological Tests indicate that alpha, beta and radium are preserved with nitric acid (HNO3) to pH <2. The analytical laboratory Condition of Sample Upon Receipt Form dated August 15, 2017 indicates that "*all aqueous samples requiring preservation preserved correctly*" as "*YES.*" However, pH was neither recorded on the provided chain of custody for samples collected on the August 14, 2017 nor recorded on the provided analytical laboratory receipt form dated August 15, 2017.

  40 CFR Table II Metals, chromium (Cr) VI preservation is listed as pH = 9.3 to 9.7 and the related Footnote 20 Cr-VI states "*To achieve the 28-day holding time, use the ammonium sulfate buffer solution specified in EPA Method 218.6. The allowance in this footnote supersedes preservation and holding time requirements in the approved hexavalent chromium methods, unless this supersession would compromise the measurement in which case requirements in the method must be followed.*" USEPA provides additional guidance for 40 CFR 136.3 Table II preservation requirements for NPDES approved methods in https://www.epa.gov/cwa-methods/hexavalent-chromium-questions-and-answers#hierarchy.

- Reviewed contract laboratory analytical report dated April 26, 2016 for Outfall 002 total cyanide monitoring and September 13, 2017 for the results of annual August 2017 effluent characteristic monitoring lists methods which are not listed as approved in 40 CFR 136.3. Cyanide monitoring and effluent characteristic testing monitoring should be reviewed for compliance with 40 CFR 136.3.

  Additional Notes: Examples of analytical methods not listed as approved in 40 CFR 136.3 include the following on the reviewed contract laboratory analytical reports: PAI 724 Rev 12 by GFPC (Radiological Test); and Hazardous Waste Test Methods / Solid Waste SW-846 procedures SW8270D by GC/MS (semi-volatiles), SW8260 (volatiles), and 7196A (chromium, hexavalent). Also, NPDES approved methods for total cyanide include EPA 335.4, Rev. 1.0 (1993), not EPA 335.2 cited in the April 26, 2016 and September 13, 2017 contract laboratory analytical report.

Section G – Effluent/Receiving Water – Unsatisfactory

- Part I.A of the 2013 NPDES Permit requires monitoring and reporting for Whole Effluent Toxicity (WET) Testing, which include 24-hour composite, 7-day Static Renewal for Pimephales promelas and Ceriodaphnia dubia (C. dubia) species once a quarter for Outfall 001. WET testing results for sub-lethal reproduction C. dubia NOEC was 41%, below the critical dilution of 54%, for samples collected June 4

thru 6, 2018 and follow up monthly re-tests to determine the length of toxicity were scheduled (GEI, Whole Effluent Toxicity Testing Report, Outfall 001, June 22, 2018).

- Part I.A (Monitoring and Effluent Limitations) in the 2013 NPDES Permit for Outfall 002 include a TSS Daily Max concentration of 30 mg/L which was exceeded in June 2016 as previously discussed.

ATTACHMENTS

Attachment A
Spring 13 and Spring 39 Interception System
Components Reported Off-Line in E-mail to USEPA
Summary since 2016 NPDES RI

After the 2016 Annual Routine Maintenance reported completed on September 29, 2016, one or more of the seepage interception water collection systems (WCS) and ground water withdrawal components were reported as not being operated, as follows:

Initial E-mail	Off-Line	System	On-Line	Summary of Cause
10/12/16	10/12/16	Spring 13 WCS	10/12/16	Pump/motor replaced
01/03/17	12/24/16	Spring 13 WCS	12/28/16	Power loss/pump/gasket
03/06/17	03/06/17	All	03/06/17	Power/main breaker
04/07/17	04/13/17	All	04/13/17	Planned electrical outage*
06/07/17	06/08/17	All	06/08/17	Planned electrical outage*
05/11/17	06/23/17	Spring 13 and 39 WCS	06/23/17	Planned electrical outage*
08/04/17	08/04/17	All	08/04/17	Power/lighting strike
08/04/17	09/07/17	All	09/07/17	Planned electrical outage*
08/09/17	08/09/17	All	08/10/17	Remove temporary WTP
08/17/17	08/16/17	Spring 13 WCS	09/20/17	Pipe obstructed/replaced

After the 2017 Annual Routine Maintenance which started August 23, 2017 and bringing Spring 13 WCS back on-line on September 20, 2017, one or more of the seepage interception and ground water withdrawal components were reported to USEPA to not be operated including communication faults when the systems were pumping, but pump rates are not automatically recorded, as follows:

Initial E-mail	Off-Line	System	Back On-Line	Summary of Cause
09/18/17	10/26/17	All	10/26/18	Scheduled power outage*
01/29/18	01/28/18	GWW Wells	01/28/18	Electrical interruption
02/12/18	02/11/18	GWW Wells	02/11/18	Outage cause not reported
03/02/18	02/28/18	Spring 13 WCS	03/08/18	Communication fault
03/06/18	03/04/18	All	03/05/18	Main substations failed
04/17/18	04/16/18	Spring 13 WCS	04/17/18	Level sensor
06/12/18	06/12/18	GWW1	06/14/18	Pump/motor replaced
08/23/18	08/22/18	GWW1	08/24/18	Wire pinch

Permittee representatives reported a planned outage for GWW wells and for Spring 13 and 39 WCS for a future tie-in of the Lower Sulphur Gulch Seepage Extraction/Collection System. Reported annual routine maintenance for the Spring 13 and 39 WCS is scheduled for the week of September 17, 2018.

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* Note: Cause related to demolition of structures, or prepare system for scheduled outage, or installation of electrical connections, or other construction activities

Attachment B
USEPA Region 6 NetDMR NODI Codes obtained August 2018

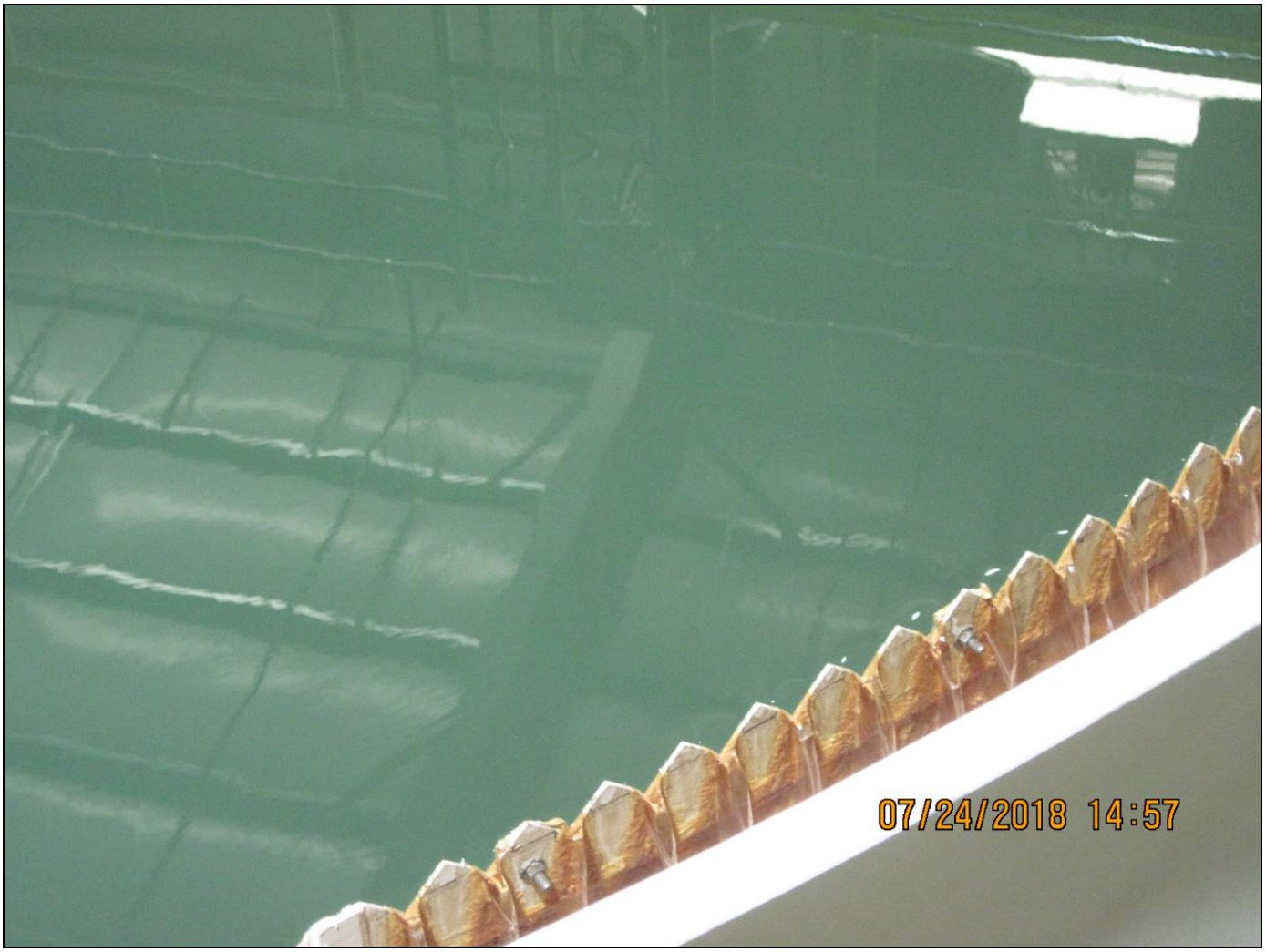
List of NODI Codes

Nodi Code	Nodi Desc
1	Wrong Flow
2	Operation Shutdown
3	Special Report Attached
4	Discharge to Lagoon/Groundwater
5	Frozen Conditions
7	No Influent
8	Other (See Comments)
9	Conditional Monitoring - Not Required This Period
A	General Permit Exemption
B	Below Detection Limit/No Detection
C	No Discharge
D	Lost Sample/Data Not Available
E	Analysis Not Conducted/No Sample
F	Insufficient Flow for Sampling
G	Sampling Equipment Failure
H	Invalid Test
I	Land Applied
J	Recycled - Water-Closed System
K	Natural Disaster
L	DMR Received but not Entered
M	Laboratory Error
Q	Not Quantifiable
R	Administratively Resolved
S	Fire Conditions
V	Weather Related
W	Dry Lysimeter/Well
X	Parameter/Value Not Reported

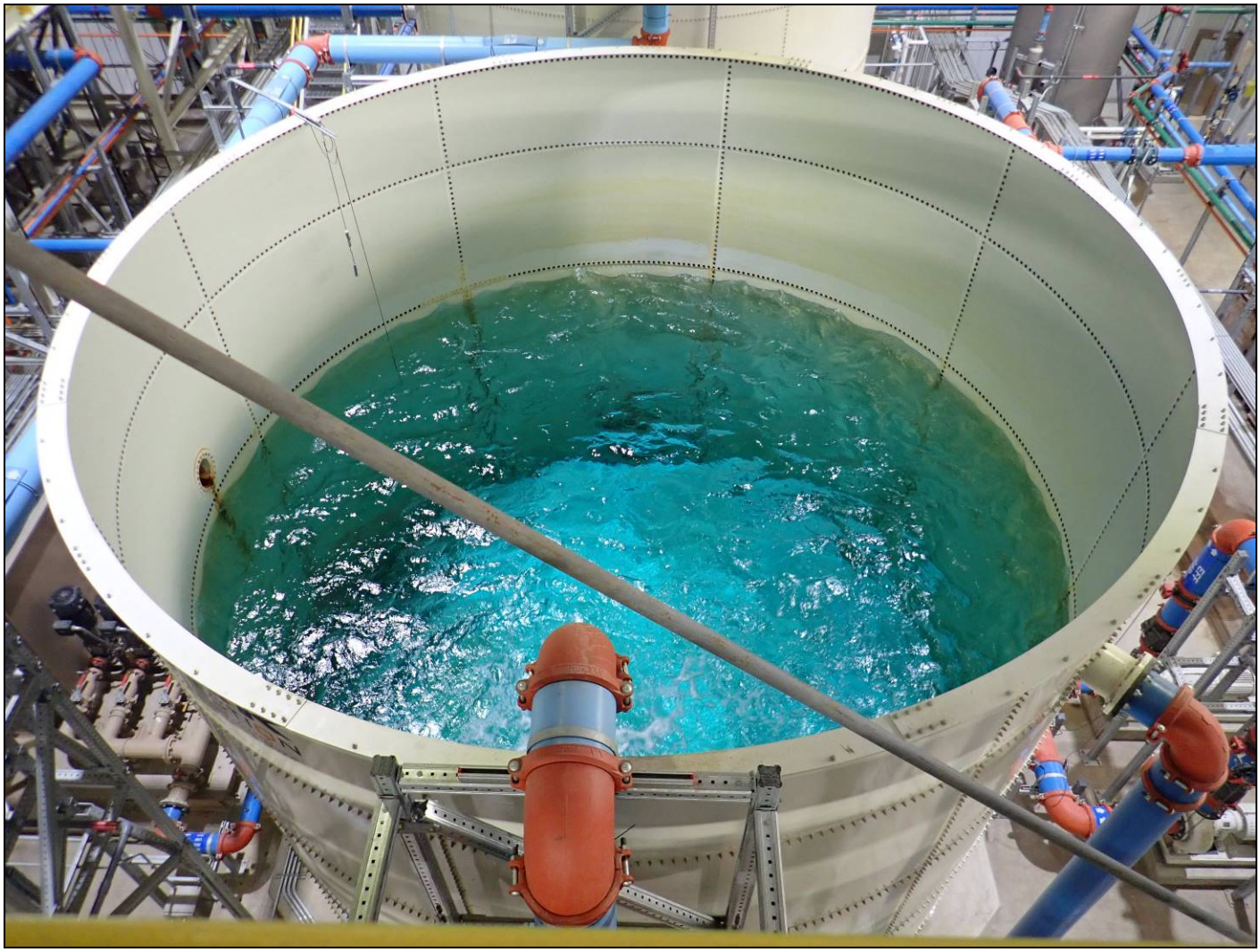
NMED/SWQB Official Photograph Log Photo # 1		
Photographer: Erin S. Trujillo	Date: July 24, 2018	Time: 1444 hours
City/County: Near Questa / Taos County		State: New Mexico
Location: CMI Questa Mine, Water Treatment Plant, Mine Site		
Subject: Example of tank that was described by Permittee Representative to be offline waiting for repair / re-coating to prevent corrosion.		

NMED/SWQB Official Photograph Log Photo # 2		
Photographer: Sarah Holcomb	Date: July 24, 2018	Time: 1452 hours
City/County: Near Questa / Taos County		State: New Mexico
Location: CMI Questa Mine, Water Treatment Plant, Mine Site		
Subject: Example of buildup on circular clarifier weir. Water flow over weir was not distributed equally. WTP operators described how limited access around the clarifiers / clarifier weir affected maintenance and removal of buildup. Removal was done with water hoses and brushes. A design criterion for weirs is the weir overflow rate (e.g., gallons over each foot of weir each day). Buildup at weir teeth can cause short-circuiting, poor settling and uneven sludge blanket buildup.		

NMED/SWQB Official Photograph Log Photo # 3		
Photographer: Erin S. Trujillo	Date: July 24, 2018	Time: 1457 hours
City/County: Near Questa / Taos County		State: New Mexico
Location: CMI Questa Mine, Water Treatment Plant, Mine Site		
Subject: Another example of a circular clarifier with weir build up / precipitate.		



NMED/SWQB Official Photograph Log Photo # 4		
Photographer: Sarah Holcomb	Date: July 24, 2018	Time: 1513 hours
City/County: Near Questa / Taos County		State: New Mexico
Location: CMI Questa Mine, Water Treatment Plant, Mine Site		
Subject: Water in effluent surge tank prior to pH adjustment, flow to effluent storage tank and discharge at Outfall 001.		



NMED/SWQB Official Photograph Log Photo # 5		
Photographer: Erin S. Trujillo	Date: July 24, 2018	Time: 1521 hours
City/County: Near Questa / Taos County		State: New Mexico
Location: CMI Questa Mine, Water Treatment Plant, Mine Site		
Subject: Staining and hairline cracks were observed on the concrete floor around the ICP low pH Filter Press.		

NMED/SWQB Official Photograph Log Photo # 6		
Photographer: Erin S. Trujillo	Date: July 25, 2018	Time: 0847 hours
City/County: Near Questa / Taos County		State: New Mexico
Location: CMI Questa Mine, Water Treatment Plant, Mine Site		
Subject: Looking south toward Red River from highway NM 38 right of way, rock rip rap, culvert pipe outlet and flow at Outfall 001.		

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NMED/SWQB Official Photograph Log Photo # 7		
Photographer: Erin S. Trujillo	Date: July 25, 2018	Time: 0848 hours
City/County: Near Questa / Taos County		State: New Mexico
Location: CMI Questa Mine, Water Treatment Plant, Mine Site		
Subject: Looking at Red River downstream near Outfall 001 at the confluence of shallow side channel (foreground) and Red River (background). Arrow points to Red River which appeared turbid at this location. The effluent in the side channel was clear. Algal growth was observed in the side channel.		

NMED/SWQB Official Photograph Log Photo # 8		
Photographer: Erin S. Trujillo	Date: July 25, 2018	Time: 0848 hours
City/County: Near Questa / Taos County		State: New Mexico
Location: CMI Questa Mine, Water Treatment Plant, Mine Site		
Subject: Looking west at Red River downstream of Outfall 001 and side channel confluence.		

NMED/SWQB Official Photograph Log Photo # 9		
Photographer: Erin S. Trujillo	Date: July 25, 2018	Time: 0850 hours
City/County: Near Questa / Taos County		State: New Mexico
Location: CMI Questa Mine, Water Treatment Plant, Mine Site		
Subject: Algal growth in side channel at and above Outfall 001 discharge. Arrow points to Outfall 001 discharge entering side channel.